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Clean Copy of the Amended Specification (Paragraph on Page 7 at lines 12-14)

The luminescence of the cells is preferably measured using an X-ray or Polaroid® photographic film, a CCD-camera (Charge Coupled Device), a liquid scintillation counter or, most preferably, a luminometer.

Clean Copy of the Amended Specification (Paragraph on Page 11, line 18-Page 12, line 8)

Measurement of light emission can be done by using X-ray or Polaroid® photographic film, using a liquid scintillation counter, a CCD-camera or a luminometer. The CCD-camera is an instrument which is capable of detecting very low levels of light. In the applications of this invention such a device could be used for the detection of tetracycline residues in food material such as vegetables or meat. The detection of light emission could be directly monitored from the surface of the food material sprayed with engineered luminescent bacteria. Either chemiluminescent (such as peroxidase-luminol) or bioluminescent (such as luciferase-luciferin) reactions can be utilized. The luminometric method is performed with the aid of genes encoding either bacterial or beetle luciferases such as those described in Figures 2 and 4. Several luminescent bacterial species such as V. harveyi, V. fischeri, P. leiognathi, P. phosphoreum, Xenorhabdus luminescens, etc., exist. Luminescent beetles are, for example, Luciola mingrelica, Photinus pyralis, Pyrophorus plagiophthalamus, Lampyris noctiluca, Pholas dactylus, etc. Also, several eukaryotic species in the sea which luminesce, such as marine ostracod Vargula hilgendorfii, jellyfish Aequorea victoria, batrachoidid fish Porichtys notatus, pempherid fish Parapriacanthus ransonneti, etc., exist. Fluorescent reporter proteins such as green fluorescent protein (GFP) or any of its variants could be used in the methods described in this invention (Li, X. et al. (1997) J. Biol. Chem. 272, 28545-28549).